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ABSTRACT

A number of common procedures underlie speaking, writing, listening, and reading; some students acquire these through exposure while others do not. A program for the teaching of procedures will differ from many conventional programs in that it will first identify and recognize these procedures. Abstract and complex prose and issues of organization, style, and rhetoric are not frequently taught, although they are tested; however, students frequently perform poorly on such tests because there has been scant opportunity for them to learn these features of discourse. Mastery entails procedures for reading a text analytically and for producing effective writing. Such procedures must be taught for students to perform well in writing tasks. Tests erroneously assume that performance in the receptive mode indicates proficiency in the productive mode. Procedures for dealing with experience by temporal, spatial, and logical structuring must be taught, as well as aspects of medium (imagery, metaphor, symbol), structure, voice, and operations in producing and receiving discourse. (DF)

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Development Report

Number 1

Learning and Teaching in English

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Learning and Teaching in English

Alan C. Purves

In this paper I should like to explore two concepts -- opportunity to learn and mastery in learning -- as they affect the achievement of students in English. I shall do so from both theoretical and practical standpoints. I shall begin with a finding from research in reading.

In the study of reading achievement in fifteen countries (1973), Robert Thorndike found that differences between high-scoring and low-scoring fourteen year olds could best be explained by a combination of their score on a vocabulary test and of an index of their socio-economic status. When this finding was reported, journalists and other commentators said schools don't make a difference. Such an interpretation is erroneous in that the analysis only deals with differences in achievement and not with absolute levels of achievement, which by international standards are quite good. But beyond this cavil with the interpretation, I want to suggest two other concerns. I have recently re-examined the test and I found two points that are worth making.

Opportunity to Learn

The first point arises from a consideration of the kinds of passages students were asked to read and answer questions about, two of which follow:

> 1. During the present century, scientific study of man's surroundings and experience is commonly accepted as the desirable way to determine the truth or falsity of statements, opinions, or beliefs.
>
> This was not always so. During past centuries there was much reliance on authority. The opinions expressed by persons in positions of authority and the written statements in approved documents were frequently accepted and taught as oracles of truth. Those questioning

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the accuracy or validity of these opinions were in grave danger. Many persons, later recognized as leading contributors to the progress of mankind, suffered torture, imprisonment, and even death because they dared to question beliefs or opinions which we now see to have been demonstrably false.

The scientific method emphasized the inductive rather than the deductive approach to the solution of problems. The inductive method is characterized by observations, measurement, definition, enumeration, classification, and the formulation of conclusions on the basis of objective evidence. On the other hand, authoritarianism utilized the deductive method, namely, reasoning from the major premise to a conclusion, without necessarily making explicit all the elements involved in the final statement or opinion.

In one sense authority and scientific method may be harmonized. It is conceivable that the major premises of an authority may be based on scientific studies which have produced demonstrable truths. Deductions made with these truths as major premises and with strict adherence to the principles of logic should be valid.

2. If you were to begin to enumerate the various uses of paper, you would find the list almost without end. Yet, there was a time when this familiar item was a precious rarity, when the sheet of paper you now toss into the wastebasket without thinking would have been purchesed at a great price and carefully preserved. Indeed, for long centuries in man's history, paper was unknown. People wrote on specially prepared sheepskins or goatskins called parchment.

About twenty-two hundred years ago, the Chinese people discovered how to manufacture paper from wood pulp. Later the secret reached Europe. But for many years, the whole operation was done by hand. Imagine making paper by hand, sheet by sheet! It was a reasonably simple process, but it is easy to see why paper was used only by the wealthy.

The first machine for making paper was invented by a Frenchman named Louis Robert. It was a crude machine by today's standards. Many European and American inventors have since contributed to the development of the more efficient papermaking machines now in use. In our time, paper is used throughout the world.

The students who scored poorly on the test had few problems with the second passage, but they had great difficulty answering questions about the first. That passage is abstract; it uses latinate language; it does not follow a narrative pattern but a pattern of comparison and contrast; it contains several sentences that are complex in the way the propositions are connected. One might ask

how many students have had more than minimal exposure to the kind of prose represented by that passage. An informal survey of teachers suggests not many, except in advanced classes. So, many students do not do well or if they do it is because they have had the advantage of a home environment where a large vocabulary is encouraged.

The second point arises when one looks at the kinds of questions the students were asked to answer. There were four kinds: one asking the student to find specific information in the text

> The process of making paper was first discovered by
> A. an American
> B. the French
> C. the Chinese
> D. Louis Robert;

one asking for the meaning of the whole passage or large segments

> A central idea of the preceding article is that
> A. deductive methods are hard to apply
> B. science and logic are opposed
> C. facts and opinions are about the same thing
> D. scientific and authoritarian methods may complement each other;

one asking for inferences beyond the information given in the text

> We may conclude that, after Robert's invention, paper became
> A. cheaper
> B. more valuable
> C. stronger
> D. rarer;

and one asking for analysis of the organization or style of the passage

> Which of the four paragraphs is primarily concerned with comparison?
> A. 1st
> B. 2nd
> C. 3rd
> D. 4th.

Again, if one looks at the performance of lower scoring students on these types of questions, one finds that they score adequately on the first three types but very poorly indeed on the fourth. I have asked teachers how they divide their

time among these four types and they have reported that they seldom deal with the fourth. It is a matter of luck or of non-school forces that students perform creditably on matters of organization and style.

Abstract and complex prose and issues of organization, style, and rhetoric are, therefore, not frequently objects of instruction; yet they are tested and the students are found wanting. I would submit that they are found wanting because they have had scant opportunity to learn what is tested.[1] It would seem at first glance that opportunity to learn could simply be translated to exposure, that all one had to do was to insure that students had a chance to read abstract prose or to write expository essays, or to be presented with Greek mythology or whatever it was that the schools or teachers wanted them to learn. Certainly exposure constitutes a part of opportunity to learn, but if one looks at the second aspect of these findings, exposure to rhetorical analysis may not suffice to promote learning. There must occur more. In fact some recent informal studies suggest that more writing does not in and of itself produce better writing (Hoetker and Brozick, 1978). Similarly more reading may not produce more thoughtful reading, nor more topics in any subject better understanding of how to deal with a topic.

How Procedures are Learned

Opportunity to learn leaves open the question of what is to be learned. The concept of mastery attempts to deal with that question. Mastery, I would suspect, entails the acquisition of procedures for dealing with material -- the procedures for reading a text analytically, the procedures for producing a coherent and

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1. This point is clearly supported by the work of Mina Shaugnessy in Errors and Expectations (1977), who shows the lack of opportunity to learn in writing.

effective piece of writing.[2] These procedures must be taught, more consciously taught than they are now.

Currently much of what is learned in English, such as writing an organized paper, developing cogent argument, interpreting a literary text, finding a symbol, is learned through trial and error or through modelling. Students, for instance, are asked for the theme of a story and, failing to come up with one, are asked a series of questions leading to a theme. As the experience is repeated, eventually, some students are successful, but not many, and none are explicitly taught any principles or procedures for independently deriving a theme. Many students become disenchanted with literature, just as many become disenchanted with writing after not learning the procedures for writing a passable essay. Those parts of English that have clear rules may be the only ones learned -- punctuation, for example.

What might these procedures involve? I believe they involve ways of producing and receiving linguistic utterances, and thus mastering English (Figure 1). People should be able to express themselves clearly and forcefully; they should be able to utter (or outer) their thoughts and feelings so that others might understand them. They should also have the ability to apprehend the utterances of others. Utterances may be oral; they may be written; they may be presented through various media. In some instances it matters little what the medium might be; in others the differences among media might assume great importance. Traditionally English teachers have thought of four activities: reading, writing, speaking, and listening. I would suggest that one think of them globally

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2. Procedures must, I think, be distinguished from rules. A rule, such as a spelling rule or a punctuation rule, is arbitrary, and it brooks no deviation. A procedure follows from a principle, broader than a rule, and it allows for variation in the following of it.

according to whether the individual is producing or receiving and then pay attention to the differences among media. To take an example: In most narratives there are the phenomena of character and the ways by which character is developed. Whether a child can apprehend character and characterization in a narrative appears to be different from whether or not the child can employ techniques of characterization in creating a narrative. At the same time, it may make less of a difference whether a child can apprehend character in a narrative that is heard as opposed to one that is seen in a book or a story. Any visualization of character, however, be it through illustration, acting, or the televising of a character, can modify one's understanding of character. The distinction between media here becomes important only when there is added to the semantic freight of the words other directions to the individual as to how something is to be apprehended. As between listening and reading, however, there is a minimal distinction, unless the oral presentation is heavily dramatic. For teachers, the distinction between receiving and producing looms as more important than that between media. We are all well aware of the student who can recognize errors in other people's writing but commits the same errors in spontaneous writing. So it is with the concept of characterization: a student may recognize inconsistency of character in the story of another but may create several inconsistent characters in an original story. It seems to me that we cannot say that the student has really begun to master characterization unless we have ascertained that the mastery involves both complex reception and rudimentary production. Even then, there may be a long way to go. I make this point for several reasons, but one of the main ones concerns the issue of testing. Too often tests, particularly standardized tests, concentrate on reception and assume that because a student can perform the task in the receptive mode, the

student is proficient in the productive mode as well. Such an assumption appears to me to be unwarranted, particularly since a great number of important decisions about students and about instructional programs are made on the basis of such tests -- wrongly I think.

Aspects of Discourse: Experience

What is it that these activities of receiving and producing deal with? What is it that people are to learn to behave clearly about? In the course of my research, I have become aware of four primary aspects of the mother tongue which combine to form utterances and which should be, severally and jointly, the objects of instruction. The first of these is the experience itself, the stuff about which communication is made. The experience is what a person is writing about, for instance, and the way in which the person conceives and feels about what is being written about. This experience has a content, a subject, and a series of emotional overtones that the writer or speaker wants to convey or that the listener or reader catches from the message. Some would call all of this content, some experience; I prefer the latter term because it accounts for the differences between readers and listeners as well as that between writers dealing with the same subject. Two writers might be describing the same phenomenon, but they perceive it and feel about it slightly differently. These differences form different experiences for the writers or for the readers. No two readers read the same text in precisely the same way, just as no two people perceive the same object in precisely the same way. There are great areas of similarity, but there are fine distinctions between even the most similar of readers. Unavoidably people filter other experiences, whether virtual or vicarious, through the set of experiences that they have had. It is for this reason that no two critics, however well trained, will come up with the same reading of a text. If

this be so, then certainly no two average readers can be expected to perceive the experience of a text in exactly the same way.

Despite the individuality of experience, there seem to be some common ways of considering experience. We think of events or objects as having relationships in time and in space; we think of events or objects as having causal relationships to each other; we think of events or objects as having similarities or differences so that we can classify them, compare them, or contrast them. Events or objects may be discrete, but we tend to impose temporal, spatial, or logical relationships among them. These relationships have a common base and they are subject to certain procedural rules that most people follow. Put more simply, we list things and make groupings of our lists which we call classes; we assert a temporal order to the way we do things such as cook or assemble a car; we look at effects and infer causes. All of these are procedures for dealing with experience that have certain consistent attributes regardless of the differences among experiences. The steps in cooking soup resemble those in baking a cake. These procedures hold not only in matters related to "English" but in other subjects as well -- science, history, mathematics -- yet they are procedures that need constant and explicit teaching, for they are not always part of the equipment of all students, as research has shown (Taylor, 1977; Purves, 1978). These procedures must be taught.

In a similar vein, many students are asked to discuss the theme of a story or a film; they appear at a loss. They have not acquired the procedures for deriving a theme -- an abstraction -- from a text and when they first try they experience difficulty. There are a number of cues as to how this is done, and they come, to a great extent, from examining other aspects of a text besides the experience.

Aspects of Discourse: Medium

Besides the experience, there exist the medium through which the experience

is conveyed, the structure of the experience, and the voice of the individual presenting the experience, which three form the technical aspects of language. The medium is language, words, phrases, sentences, paragraphs, as well as rhetorical devices, such as metaphor, symbol, and irony. Any linguistic utterance uses words, which have denotative and connotative meanings -- some of these shared by all who use the language, others peculiar to particular readers and writers, speakers, or listeners. Psychological tests indicate the range of these shared and private meanings; certainly a teacher sensitive to language is aware of the individual differences in nuance of meaning within a class. Particular words have particular associations for particular people. Some of these are shared by a culture at a particular time or in a particular place -- such sharings becoming dialectical variants.

Beyond these aspects of meaning, occur the more complex ones: imagery, metaphor, and symbol. Within a culture, words may produce sense impressions common to a group. When words are put together to explain words or concepts as "the ship plowed the seas," meaning, connotation, and image combine to help the writer or the reader perceive a new set of meanings and have a new set of reactions and impressions.

Metaphor is one of the primary linguistic devices in both expression and communication. Proceeding from the analogizing instinct of people, the urge to understand phenomena by relating them to other phenomena already known, metaphor is an important tool in helping people comprehend the world around them and communicate their comprehension to others. The metaphoric basis of language has been explored by scholars in a number of disciplines, as has the extension of metaphor into allegory, myth, and the process of interpretation. Of all the rhetorical devices, it is the one most used in all forms of discourse, from

being "safe at home" in baseball to the elaborate discussion of the parallels between Stephen Crane's Red Badge of Courage and the New Testament. In a sense this latter discussion is a complex prolongation of the activity that a young child engages in when using the word "doggie" to describe any newly perceived four-legged animal. Whether in large or in small, the medium of language is employed as an analogizing tool of apprehension and communication of both what is perceived and what is felt about that perception.

The procedures for looking at language include obviously the extension of vocabulary, the use of context to determine what nuance of meaning is intended, directing one's attention to the images created by language. All of these involve having the reader or writer become aware of language. Some of my recent research suggests that students are often not aware that language is being used metaphorically; they do not perceive car names such as Pinto as metaphoric or as using connotation to make their impact. Other research tends to show that students are comprehending similes readily but not metaphors. In order to comprehend metaphor, one might have to develop the procedure of turning it into simile, but there is more, as I shall argue later.

Aspects of Discourse: Structure

In addition to language used as a medium, most discourse has a structure or organization. This structure appears in both small and large units of discourse -- phonemes, morphemes, sentences, paragraphs, whole essays, stories, novels, or plays. Structure is usually based on a series of decisions about juxtaposition, what should be placed next to what; repetition, what should be repeated or reinforced; and configuration, how the whole thing should appear. In many cases structure is fairly well limited by a set of contraints. A recipe should follow a temporal order fairly closely; an index should follow an alphabetical order. In other cases, there is a certain freedom and choice as to

structure: what rhyme scheme to use, what scene to put next to what scene in a play, whether to have the main point at the beginning or end of a paragraph, where to locate the modifiers in a sentence. Decisions about structure are made by the writer or speaker, who considers such rhetorical matters as unity, coherence, and emphasis. The reader or listener tends to perceive such aspects of structure as stand out; more often than not the reader or listener is barely aware of them, particularly of many of the more subtle kinds of repetition or juxtaposition -- of vowel sounds in a poem, or of words or phrases in a novel, for example.

In observing students working with structure in their reading, we have found that children up through junior high school have difficulty in comprehending flashbacks or the story within a story. Older students haven't established such procedures for analyzing structure as looking for repetition and noting when repeated elements take on variation; looking for breaks in the normal flow of time or space; looking for visual cues such as paragraphs and underlinings; or looking to see if there is a repeated formula as in a cookbook. In their own writing, students have great difficulty deciding on appropriate beginnings or endings.

Aspects of Discourse: Voice

Finally, most pieces of writing or sections of discourse are modulated by what might be called a voice, a term used to comprehend such matters as point-of-view, attitude, and tone. When James Moffett clearly showed the continuum of point-of-view in writing from the stream of consciousness monologue to the totally dispassionate scientific presentation, he asserted that the distinguishing points along this continuum concern the degree to which the writer or speaker asserts a personality, or presents him or herself to the audience. Yet, point-of-view is not all there is to voice; the writer's or speaker's attitude towards the

subject of the discourse is also an aspect of voice as is the tone or emotional freighting of the presentation. Although the procedures as to how to determine what voice to use as a writer or how to determine the writer's voice are not fully known, I suspect do exist, in part since I have found that junior-high-school students are better at the latter task than the former, perhaps because of practice.

Operations in Producing Discourse

Experience, language, structure, and voice constitute the four distinguishing features of discourse both as it is produced and as it is perceived. The producer must make decisions in each of those four features in order to produce a piece of connected discourse. From what has been studied of the writing process, there appear to be four stages at which the writer makes decisions: conceiving, drafting, revising, and editing (King, 1978). At the conceiving stage, the writer plans what is to be said, makes notes, makes an outline, orders the material. In drafting the writer creates the first connected discourse; and the stage of revision may follow drafting or be intertwined with it. Since revising involves re-reading and performing some of the critical activities related to reading; this stage most clearly shows the interdependence of the productive and receptive operations. Editing, the final stage, comes when the text is nearly ready for the audience and the writer decides to do no more. In the discussion of errors that follows, although the primary reference is to reading, the errors emerge also from an examination of students conceiving and drafting.

Operations in Receiving Discourse

A receiver must also perform certain operations, which fall into three major categories: perceiving, inferring, and evaluating. Perceptual operations

involve the analysis and classification of the features of discourse separately and in combination. The perceiver asks such questions as "What kind of language is being used?" "How is the selection structured?" "What is the producer's point of view?" "What is the nature of the total experience?" These questions might be intrinsic, looking at the selection as an entity in itself; or extrinsic, looking at the selection in relation to other examples of discourse. In the former case, the perceiver is asking how the discourse is put together; in the latter, how the discourse can be classified as an individual instance of a large body of discourses. The distinction is between a kind of comprehension that determines the very fabric of the discourse and that which locates the discourse in the world, between saying that a poem has fourteen lines with a particular kind of rhyme scheme and saying that the poem is a Shakespearean sonnet. The latter kind of statement presupposes a broad experience with other examples of discourse; the former a knowledge of some of the terminology of analysis.

Four Kinds of Error

Students appear to make four kinds of errors in conceiving and in reporting their perceptions - see Figure 2 (Purves, 1978). The first kind of error might be called the error of subjectivity. When asked to define fear, for example, a student who responds "fear is bad" offers a subjective definition. At times, of course, subjectivity is desired, but in many instances, particularly when procedures requires objectivity, it is not. Another kind of subjectivity arises when a student is unable to relate a text to his or her experience and so cannot comprehend it. This inability may result from psychological blocking or may stem from unfamiliarity, as when a student does not know how a plow works and thus cannot comprehend the ship plowed the seas, or as when a student has had insufficient experience with the word obese to recognize that it has generally more pejorative connotations than plump or fat.

A second kind of error is the error of incompleteness. In a classification exercise, students frequently omit a miscellaneous category, or they group 7-Up, cologne, coffee, and ink as drinks. Another form of incompleteness is that in which a student gives part of what was requested, or fails to answer the "why" attached to a question. When a student notes the broad aspects of a text but not the details, a third kind emerges, as when a group of students were asked to describe the metaphor in the following poem.

THE MAN IN THE CROW'S NEST

Strange to me sounds the wind that blows
By the masthead in the lonely night.
Maybe 'tis the sea whistling--feigning joy
To hide its fright
Like a village boy
That, trembling, past the churchyard goes.

--T. E. Hulme

Only one student saw that the comparison was of the two whistlings. The rest had difficulty explaining why the sound of the sea was like a boy in a churchyard. In this metaphor the cross-term, whistling, is implied not stated.

Related to this type of error is the error of non-specificity, as when a student is asked to tell chronological relationships of two events and gives only a vague "before." Another kind of non-specificity comes when students characterize a person in a text but fail to give details from the text to justify that characterization.

The fourth kind of error might be called the error of non-differentiation. One form of this can be seen in the use of overlapping categories in classification

as in the grouping "tricycle, tandem, two-wheelers." A second form can be seen in the mixing of two principles in describing or classifying, as when a student gives the answer "on page 22" when asked when something occurs in a character's life.

Inferring and Metaphor

Inferential operations may be said to include both first-order and higher-order inferences. Given a description of a boy's physical characteristics a first-order inference might be that the boy is sick. We can call this a generalization rather than an inference if we prefer. With more information from the text or from experience, we might infer further that the sickness is psychosomatic or is a manifestation of some personality trait. In a literary text, we might say tha the sickness is symbolic of some other aspect of the boy. All of these would be higher-order inferences, meaning that they involve going beyond the level of generalization to such matters as causation, relationship, intention, or the like, and they appear to be related to the ability to make analogies as was earlier discussed. The major kind of error in interpretation appears to be related to the kind of error students make in comprehending metaphoric or symbolic language (Purves, 1978).

The nature of the task that the students are asked to perform successfully involves a complex process of thought and an elementary understanding of figurative language -- i.e., the metaphor as a sign and/or a symbol. This thought process is complex because it asks the students to look at two objects that are normally unrelated to each other, and to relate one to the other in terms of what both of these objects characteristically represent or stand for. Moreover, the thought process must be executed simultaneously, so the students can comprehend the full sense of the relationship that is established metaphorically between the two objects. In doing so, the students are also required to deal with a certain

level of abstraction, since the task does ask that they relate both objects to some quality or characteristic (or set of qualities or characteristics) common to each in vastly different ways.

To take a relatively simple example, one in which a large proportion of students answered correctly; they were asked to match a name of an object, an arrow, with a fast, expensive sports car. To make this match, the students must comprehend what qualities or characteristics that both the sports car and the arrow have in common; as well as what the arrow mythically or symbolically stands for. They must comprehend that as the fast, expensive sports car is characterized by its speed and performance, so the arrow is also representative of speed and performance. The students must simultaneously know that the sports car and the arrow are two objects distinct from one another and that the characteristics of speed and performance determine how the two objects can be related. Furthermore, these characteristics are only implicitly or symbolically represented in the arrow and applied to the car.

To take a more difficult example, one in which a large proportion of the students answered incorrectly; they were asked to match a name of an object, a leprechaun, with a type of inexpensive, "economy" car that is practical and reliable. To do this, the students must comprehend that both the "economy" car and the leprechaun have certain qualities or characteristics in common, and that the leprechaun is mythically or symbolically representative of these characteristics. This is to say that the students must simultaneously know that the "economy" car and the leprechaun are two objects distinct from one another and that the characteristics of good gas mileage, practicality, reliability, and less than 100% performance at times, are what relate the "economy" car to the leprechaun. In making this relationship, however (and this is where

the difficulty may arise), the students must know that the leprechaun, which is a legendary figure or personification in Irish folklore and mythology, personifies or symbolizes the human qualities of thrift, reliability, and practicality, and that if his performance is less than 100% -- i.e., if something unpredictable goes wrong -- he is held responsible. The students must, therefore, be able to go beyond relating the leprechaun to the concrete object (the "economy" car) and deal with the abstract qualities of thrift, practicality, and reliability, in order to make the proper relationship between the leprechaun and the inexpensive "economy" car, since these characteristics are only symbolically represented in the leprechaun.

It would appear that students have difficulty in performing what we might call a formalizing operation, one in which the individual must relate a concrete entity to an abstract principle. In the processing of metaphoric language, particularly, the formalizing process occurs, as when a person must abstract a quality from one given and match that abstraction with an abstracted quality from a second. It is this task that occurs in most kinds of literary interpretation. One reads a story about an individual, say Nathanael West's Miss Lonelyhearts, and abstracts from the character and actions certain generic qualities; then sees what external story or person has those qualities; then relates the novel's character to that of the external -- in this case Miss Lonelyhearts to Christ. There are occasional clues, but in many cases those clues are minimal.

At the most sophisticated level, this process is performed in the manner of Northop Frye in The Anatomy of Literature or of Joseph Campbell in The Hero With a Thousand Faces. In an experimental seventh-grade class at the Curriculum Laboratory there was work expanding from the metaphor unit to myth, and the students were asked to compare myths about the same topic (e.g., the creation) from

different cultures. They were able to find many myths, but many had trouble with the generalization from their data, with the making of connections. Yet they could handle the abstraction of comparative mythology. The procedure could, in part, be mastered.

Evaluating

Evaluative operations involve judgments about the worth of the discourse or its parts or of the person or persons presenting the discourse. Some evaluations are quite personal -- "I like it." Many of them claim a greater objectivity -- "It is well-made," "It is morally appropriate," "It is effective in arousing the emotions." The first kind of judgment I have elsewhere called a statement of personal engagement or involvement (Purves and Rippere, 1968). In a sense it does speak to the personal interaction between the perceiver and the perceived, the reader and the text, the audience and the speech or presentation; at the same time it is a statement of value, and in many instances may be a way of expressing what in other cases would be a more dispassionate evaluation. The evaluative operations also contain those that assert the propagandistic nature of a text, and deal with the relation between intention and effect, and judge the writer's intention and through it the writer.

The errors with respect to these operations would appear to fall into the same groups as have been already mentioned, although error itself would appear to be less a matter of the actual evaluation than the presentation of the evaluation.

Conclusion

The operations involved in producing or receiving discourse, then, suggest that while there may be individual differences such as that between the person who outlines and the person who does not, a number of common procedures underlie our speaking, writing, listening, and reading. Many students acquire these

procedures almost automatically through exposure; many more students do not. A recent study of remedial students in a community college suggests that they have not developed such procedures as paraphrasing, classifying, comparing, and contrasting (Taylor, 1978). They could learn these procedures and then move on to improving their writing and their reading.

A program for the teaching of procedures differs from many conventional programs in that it involves knowing what those procedures are. In some cases, such as determining theme in a text, we are not so sure; in others like classifying we have more sure knowledge. Although most texts on classification assert that one starts with the genus and then moves down to the differentiae: examination of people who classify shows that this may be the end result, but not the procedure. One classifies by making a list of instances, selecting or grouping from that list, and then organizing the groups into a coherent classification system, which is presented to an audience in the textbook form. Listing, selecting, and organizing constitute, perhaps, a generalizable procedure for a number of activities such as determining cause and effects or comparisons and contrasts.

I believe that the learning of procedures is basic to mastery in English. In fact I would list these procedures among the basic skills requisite for a literate society -- just as basic as decoding or writing a complete sentence. In fact they might even underlie aspects of decoding, or sentence making. In Through the Looking Glass, Lewis Carroll defined Mastery in English

> "The question is," said Alice, "whether you can make words mean so many different things."
> "The question is," said Humpty Dumpty, "which is to be master -- that's all." ..."They've a temper, some of them -- particularly verbs, they're the proudest -- adjectives you can do anything with, but not verbs -- however, I can manage the whole lot of them!"

I agree with Humpty Dumpty that the question is who is to be master. Further, I think that I have answered a segment of that question -- that the person who is master achieves mastery through procedures. The next question is what are the stages towards mastery, and what are the constraints upon a child's attaining mastery. Those are the questions for the future, and the answers to those questions might well help us enhance the growth of our youth in their use of their mother tongues.

Figure 1

A Model of Mastery in English

Operations \ Aspects of Discourse	Experience	Language	Structure	Voice
Receiving				
Perceiving				
Inferring				
Evaluating				
Producing				
Conceiving				
Drafting				
Revising				
Editing				

Figure 2

Types of Errors in Reading and Writing

I. Subjectivity

- a. giving a subjective response when an objective one is required
- b. being unable to connect a text to one's experience
- c. having insufficient experience with a word or concept

II. Incompleteness

- a. giving a non-exhaustive response
- b. giving only part of response requested

III. Non-specificity

- a. noting main points but not detail
- b. giving little explanation or support

IV. Non-differentiation

- a. giving overlapping categories
- b. mixing two principles

V. Non-formalizing

- a. making no analogies between instances
- b. making no generalization from example

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